

KIRLIAN PHOTOGRAPHY AND THE NEW BIOELECTROGRAPHY

A new technique known as Bioelectrography improves the accuracy and repeatability of the early findings of Kirlian photography and extends the possibilities for dependable clinical diagnosis.

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A GREAT LEAP FORWARD IN BIO-ENERGETIC IMAGING

What is Kirlian photography? In essence, it involves high-voltage, high-frequency electricity that is applied to the underside of a plate made of an insulating material such as glass. When any conductive object (which could be metal or any material containing water, such as part of the body) is placed on this plate, there ensues an electric discharge through the air where the gap is narrow, close to the object. Light from this discharge can be recorded on a photographic film placed between the object and the electrified plate.

This much could have been expected. What was remarkable, however, was the discovery, made by Semyon and Valentina Kirlian in the 1940s, that the characteristics of the discharge varied with a person's physiological and mental states. The history, some suggestions regarding the physics of this process and an application to studies on mental patients were described some 15 years ago by Dr Victor Adamenko.¹

As a result of subsequent work by other investigators, it became clear that the characteristics of the discharge are sensitive to many factors in the design of equipment and the precise technique, so it was difficult for one investigator to repeat the work of another. In addition, without a means of quantifying the images, the interpretation had a large subjective element. Moreover, there continued to be a lack of any coherent theory to explain these effects. For these reasons, Kirlian photography failed to gain credibility with most doctors and scientists.

All three of these objections are now in the process of being overcome, due to the invention of a computerised version by Dr Konstantin Korotkov of St Petersburg, Russia.² To begin with, this method involves no photography—a tremendous advantage in terms of speed and convenience. Instead, the light from the electric discharge passes down through the glass plate to an electronic camera underneath. From here, the image goes to the computer in digital form. The high standards of design and construction of these instruments ensure that comparable results can be obtained among all those using them.

Gas-Discharge Visualisation

Most important is the fact that once the image is in digital form, it is possible to quantify its various parameters. A sophisticated software package, supplied with the instrument, allows you to measure the area of the image, its brightness, its "fractality" (how "jagged" the border is) and a number of other aspects. This software is being updated all the time. Now that it need not involve photography, this general type of method is known as Bioelectrography or Gas-Discharge Visualisation (GDV).

While a complete physico-chemical account of these effects will be a long time coming, there is no doubt that it will need to be based on an holistic theory of life. Such a theory has been emerging over the past three decades through the work of Dr Fritz-Albert Popp and others on quantum biology.³ It gains further support all the time and is beginning to make headway with the mainstream.

What do these images represent? In spite of much talk about the "Kirlian aura", little work seems to have been done to correlate these images (now becoming known as "Beograms") with the aura as seen by "sensitives". Nevertheless, the very immediate sensitivity of these images to a person's physical, emotional and mental state suggests that the characteristics of the discharge may indeed bear some relation to the aura.

The patterns of the image show considerable variation, even among healthy people (one could even speak of a fingerprint). Nevertheless, it is possible to define a number of types

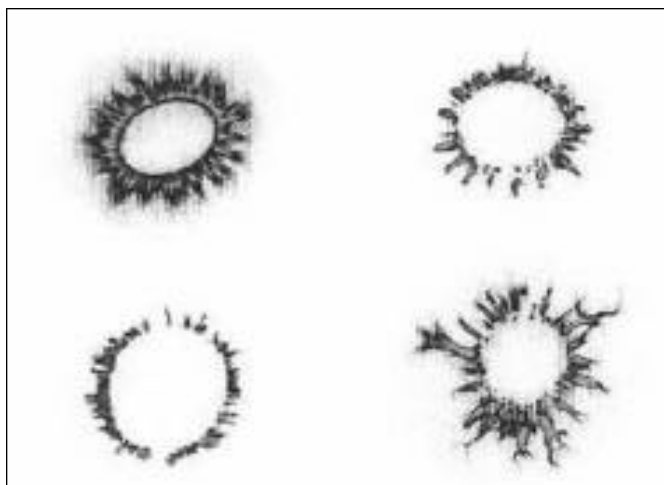


Fig. 1. Various types of finger images (from top left to right): (a) healthy adult, relaxed (the author); (b) same individual in temporary state of stress; (c) old person with low energy; (d) Reiki healer immediately after healing session; note branched streamers.

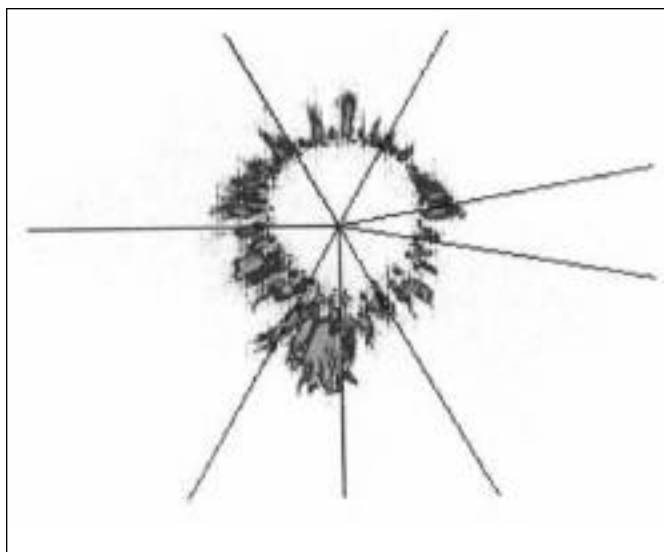
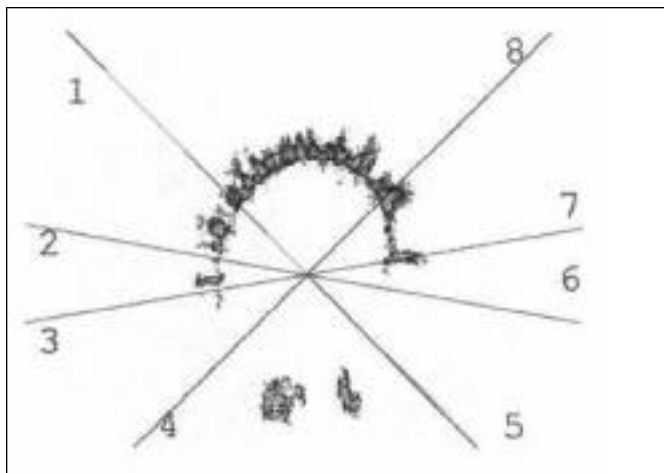


Fig. 2. Two types of defect. (a, above) left middle finger, a few days after the patient passed a painful kidney stone from left kidney; outburst type of defect in kidney sector indicates region of acute inflammation or pain; (b, below) right thumb of person suffering many years of trouble with teeth; gaps indicate region of weak energy in jaw; both thumbs were similar.



in relation to the state of health and psycho-physical constitution.

Figure 1a shows a typical beogram of a healthy adult. The colours [seen here in b&w as tones; Ed.] bear no relation to the actual wavelength of the light, which is mostly in the ultraviolet. They are "false" colours chosen to represent degrees of brightness. However, differences in brightness are rarely obvious from the image; for this, one needs to look at the quantitative values.

In conditions of poor health, fatigue or stress, the beogram tends to show reduced area, with increased brightness and fractality (fig. 1b). But this is only a general guideline: in some conditions of ill health, the area can be too great, and brightness and fractality too small.

Beograms also vary greatly with age—a fact that is now taken into account by some of the diagnostic programs. For example, healthy children tend to have high values for brightness and fractality, which might indicate stress in an adult.

Organ correspondences

As a result of long clinical experience using conventional Kirlian photography, Dr Peter Mandel in Germany has found that illnesses may be represented by characteristic defects in the finger images. Thus he was able to define sectors of the finger images corresponding to the main organ systems of the body. These sectors are broadly related to the meridian system in acupuncture. So, just as in reflexology, iridology and auriculotherapy, these observations support the intriguing idea that the subtle energy system may be holographic in its nature.

Having essentially confirmed this organ representation, Dr Korotkov has added a further useful facility, by which the software takes the sectors of the images for all 10 fingers and arranges them around an outlined human figure so as to approximate the corresponding organs and give the appearance of an aura (fig. 3).

Examples of organ representation are shown in figure 2. These also show two types of defect: there may be an outburst of the image beyond the average radius (fig. 2a), or a weak area or even an obvious gap (fig. 2b). The first corresponds to the "excess" state in acupuncture and may indicate an inflammatory condition or pain, while the second represents a weakness in energy in that organ system, which corresponds to the "deficiency" state of an acupuncture meridian, and may result in sluggish function of the organ or, eventually, degeneration. These defects may be only transitory and, as such, are not of much pathological significance. On the other hand, if they are constant, and especially if they occur in the same sector of the finger on both hands, then one should suspect frank pathology.

It should be noted that while such defects are often seen in conditions of acute local pathology or immediately after surgery, the energy system tends to compensate for any disturbance so that in chronic conditions the defects may not be manifest. Nevertheless, they can often be caused to appear by subjecting the organ to some suitable functional stress; for example, a heavy meal for the stomach or exercise for the heart.

Effects of the therapy

Although the presence of defects may give an indication of the location of pathological processes, often it does not. Thus, with our present state of knowledge, the instrument should not be relied on to give conventional medical diagnoses. But it does indicate the state of a person's energy system. Its greatest use in medicine is probably as a feedback on the effects of therapy.

Figure 3 shows "aura" beograms of a patient immediately

before acupuncture and then 30 minutes after. To see this kind of change can encourage the therapist that he/she is on the right track. It can be very encouraging for the patient as well, since he/she may not feel benefit subjectively until much later or after a number of treatments. In addition, the method can just as well show effects of negative influences, such as radiation from mobile phones or geopathic stress.

Each image is essentially a snapshot picked from a very dynamic process. But, with the quantitative facility, one can trace the time-course in a very revealing way. (Indeed, recent developments now make it possible to make a "movie", with readings as often as 30 per second.) Figure 4 represents the effects of a single, 20-minute treatment with singlet oxygen therapy.⁴

Because of the strong influence of mental factors, it is important that the person is in as stable a state of mind as possible for the treatment. Thus, on arrival, a patient should rest some 15 minutes before the first reading is taken. In addition, if it is desired to confine the examination to the physical body, one can avoid mental effects by putting a thin plastic disc between the finger and the electrode. The effect of relaxation and simple meditation is usually to increase area and reduce fractality. Figure 5 represents the course of events during the first few minutes after an experienced meditator commences meditation. Likewise, one can immediately see the opposite effects after a shock, such as a door slamming or even a painful thought.

Opposite effects may also occur if the person engages in deep imagery or other kinds of altered state of consciousness (ASC). But in this case, the images can show some other remarkable properties. In a special study of ASC, Dr Korotkov's group has defined a characteristic type of beogram. The image is seen as separated from the finger, mainly of the left hand in most cases, and especially of the left ring-finger. This is shown, for example, by some healers after they enter the healing state and by sports people while visualising their performance.

Even more specific to ASC is the behaviour of the image area during a train of rapidly repeated exposures (a "movie"). In the normal state of consciousness, this stays more or less steady or falls slowly; in ASC, it rises steeply. This finding was made during studies (of which many have been done in Russia) of children trained to see without using their eyes—so-called "direct" vision.

A really remarkable finding (by another Russian group) was made with pairs of individuals in a close, emotional relationship. When one imagined sending love to the other (who could be miles away), a detached spot was then seen on the sector of the little finger relating to the heart. This spot appeared on the left hand for the sender and the right for the recipient.

The GDV technique has clearly made a big step toward putting bioelectrography on the scientific map. We can look forward to further developments, which are gathering pace and which promise intriguing possibilities.

Continued overleaf ...

Editor's Note:

This article first appeared in *Caduceus* magazine (issue 67, Winter 2005; <http://www.caduceus.info>), from which it is reproduced with kind permission. It was also reprinted in the *Institute for Complementary Medicine Journal*, January 2006 edition, <http://www.i-c-m.org.uk/journal/2006/jan/a02.htm>. Dr Taylor's article "The Magic and Mystery of ORMUS Elements" was published in our last edition, vol. 14, no. 2, and his essay "Free Radicals and the Wholeness of the Organism" was published in NEXUS vol. 13, no. 3.

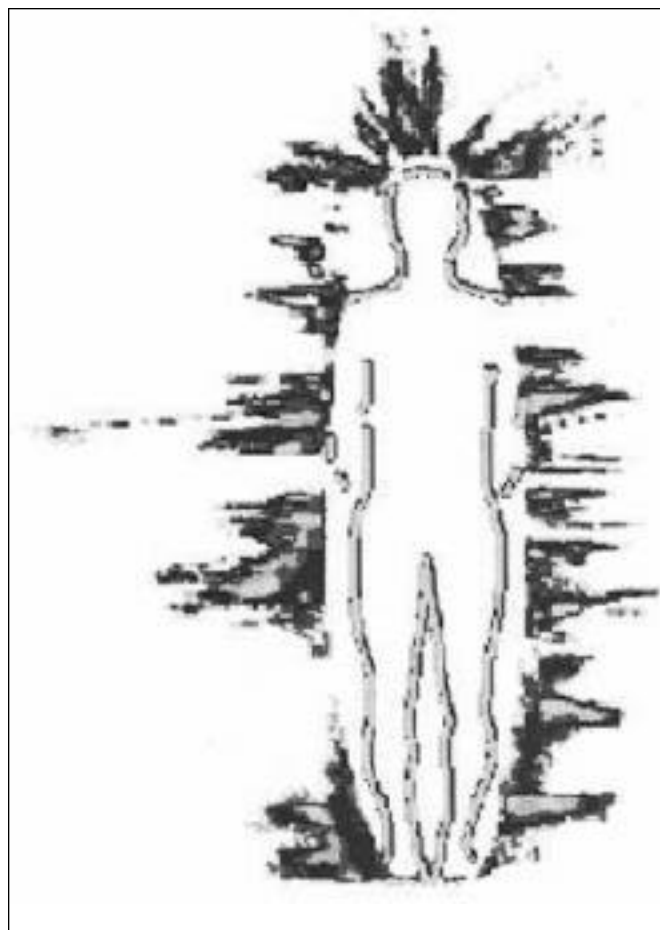


Fig. 3. Images from all 10 fingers arranged around a body outline to simulate an aura: (a) before, and (b) 30 minutes after acupuncture. [Source: Korotkov (a)]

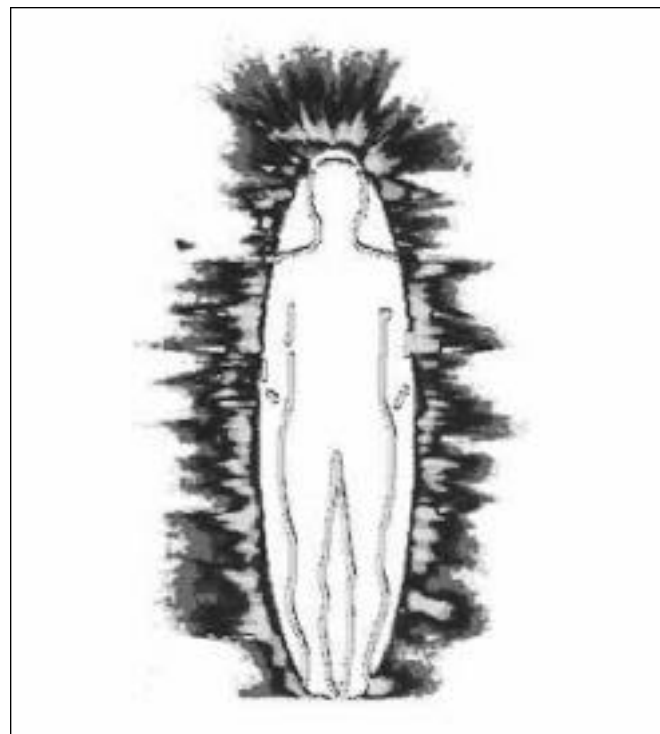


Figure 4

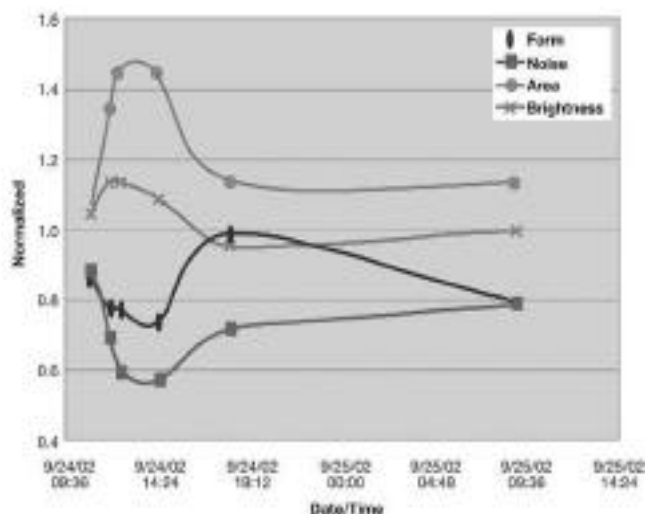


Fig. 4. An example of the use of the quantitative facility: the course of events after singlet oxygen therapy. Each point represents the average value obtained from readings on all 10 fingers of one out of four chosen parameters. (Form is a measure of fractality of the border; noise is a measure of the number of very small fragments.) Twenty minutes of therapy was given immediately after the first (control) reading (arrow).

Endnotes

1. *Caduceus* 12, Winter 1990/91, pp. 18-21.
2. Books by Dr K. G. Korotkov: (a) *Aura and Consciousness*, St Petersburg, 1999, 2nd ed., ISBN 5-8334-0330-8; (b) *Human Energy Field*, Backbone Publishing Co., Fair Lawn, NJ, USA, 2002, ISBN 0-9644311-9-1. Also see *Measuring Energy Fields* (GDV Bioelectrography Series Volume 1), edited by Dr Konstantin Korotkov, Backbone Publishing Company, Fair Lawn, USA, 2004, ISBN 0-9742019-1-X (hardback, 278 pp.). See also websites <http://www.kirlian.org>, <http://www.gdvusa.org>, <http://www.kirlianresearch.com>. Several UK therapists are using GDV, e.g., David Broom; see <http://www.iconmag.co.uk>. There have been regular conferences in St Petersburg, and in April 2005 Dr Korotkov spoke at the 8th Conference on Science and Consciousness in New Mexico (<http://www.bizspirit.com>).
3. See especially book by Dr Mae-Wan Ho, *The Rainbow and the Worm*, World Scientific (57 Shelton Street, Covent Garden, WC2H 9HE, UK), 1998, 2nd ed., ISBN 981-02-3427-9. Also available from the Institute for Science in Society, <http://www.i-sis.org.uk>.
4. This is a highly effective alternative to ozone therapy which, being entirely safe, can conveniently be self-administered. For further background on activated oxygen therapies, see my article in *Caduceus*, issue 45, Autumn 1999, p. 42. Also, for report on remarkable scientific work on the mode of action of these oxygen therapies, see my article "Free Radicals and the Wholeness of the Organism", *Network* (Journal of the Scientific and Medical Network), Spring 2005, pp. 18-20 [reprinted in NEXUS 13/03].

Correction:

In Dr Taylor's article on ORMUS Elements last edition (14/02), we included incorrect metric conversions; the equivalent to 31 pounds is 14.1 kg, and the equivalent to 58 pounds is approx. 26.4 kg. We apologise for the errors. Ed.

Figure 5

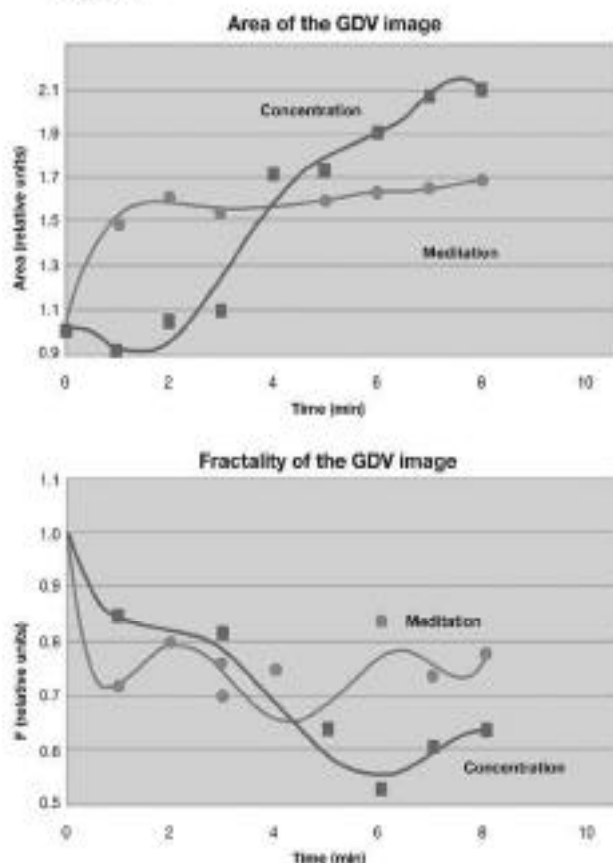


Fig. 5. Two experiments showing effects of meditation to increase area and decrease fractality of the image of a single finger. In one experiment ("Meditation"), the procedure was to calm the mind in the usual way; in the other ("Concentration"), the subject was given two different symbols on paper and, focusing his eyes on a spot halfway between them, concentrated on bringing them together in the centre of the visual field. This method tends to bring the two sides of the brain into synchrony. [Source: Korotkov (a)]

About the Author:

Roger Taylor qualified first in physiology (BSc) and then in veterinary science (BVSc). After three years' work in animal physiology, his career, including his PhD work, has been mainly in fundamental immunology. Working at the UK National Institute for Medical Research, Dr Taylor participated in discoveries of the function of the thymus and of T and B cells. Moving to Bristol University, he set up the Medical Research Council's Immunobiology Research Group, where he directed work mainly on immunological tolerance. He has written some 55 articles on immunology, and a few contributions to books.

Becoming disenchanted with mainstream biomedical science, Dr Taylor took early retirement and has spent the last 17 years studying the scientific basis for subtle energy. Much of his work has been with Dr Korotkov's computerised Kirlian equipment, mainly looking at the effects of various therapies.

Dr Taylor writes primarily for *Caduceus* magazine, based in the UK, for which he also acts as science editor. He can be contacted by email at rogerbt@onetel.com.